



UNITED STATES PATENT AND TRADEMARK OFFICE

mn

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/853,767	05/14/2001	Sebastien A. Jean	36.P318	6641

5514 7590 06/11/2007
FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

LEE, PHILIP C

ART UNIT	PAPER NUMBER
----------	--------------

2152

MAIL DATE	DELIVERY MODE
-----------	---------------

06/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

MAILED

Application Number: 09/853,767
Filing Date: May 14, 2001
Appellant(s): JEAN ET AL.

JUN 11 2007

Technology Center 2100

Jean Sebastien
Don Purpura
Neil Iwamoto
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11/27/2006 appealing from the Office action mailed 6/27/2006.

(1) *Real Party in Interest*

A statement identifying by name the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) *Status of Claims*

The statement of the status of claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct. In addition, an amendment after final rejection filed on May 31, 2006 has been entered.

(5) *Summary of Claimed Subject Matter*

The summary of claimed subject matter contained in the brief is correct.

(6) *Grounds of Rejection to be Reviewed on Appeal*

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) *Claims Appendix*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) *Evidence Relied Upon*

2002/008039	Sugiura et al	6-2002
6,816,270	Cooper et al	11-2004
6,240,456	Teng et al	5-2001
6,757,280	Wilson, Jr	6-2004
6,157,950	Krishnan	12-2000
6,611,863	Banginwar	8-2003
6,020,973	Levine et al	2-2000
6,742,039	Remer et al	5-2004

(9) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections – 35 USC 103

Art Unit: 2152

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 34-37 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiura et al, U.S. Patent Application Publication 20020080391 (hereinafter Sugiura) in view of Cooper et al, U.S. Patent 6,816,270 (hereinafter Cooper)

3. As per claims 1 and 34-36, Sugiura taught the method substantially as claimed comprising the steps of:

receiving an incoming message from a client network device residing on the external network, the incoming message being addressed to a target network device (page 6, paragraphs 123 and 124; page 5, paragraph 113).

4. Sugiura did not teach a determining if an application module residing in the computing device is configured to process a functionality requested by the incoming message. Cooper taught a similar invention comprising the steps of:

Art Unit: 2152

determining if an application module residing in the computing device is configured to process a functionality requested by the incoming message (col. 6, lines 23-34; col. 7, lines 29-62);

redirecting the incoming message to the application module in the case that the application module is configured to process the functionality (col. 6, lines 23-34; col. 7, lines 29-62); and

passing the incoming message to the target network device in the case that the application module is not configured to process the functionality (col. 6, lines 23-34; col. 7, lines 29-62).

5. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura and Cooper because Cooper's teaching of determining if an application module residing in the computing device is configured to process a functionality requested by the incoming message would increase the functionality of Sugiura's system by providing a target network device with printer support for a number of different applications and device drivers (col. 1, lines 46-49; col. 2, lines 33-36).

6. As per claim 37, Sugiura and Cooper taught the invention substantially as claimed in claim 1 above. Sugiura further taught wherein the target network device is a legacy network device (page 2, paragraph 39).

7. Claims 3 and 39 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiura and Cooper in view of Teng et al U.S. Patent 6,240,456(hereinafter Teng).

8. Teng was cited in the last office action.

9. As per claims 3 and 39, Sugiura and Cooper taught the invention substantially as claimed in claim 1 above. Sugiura and Cooper did not specifically teach the processing of the functionality by the application module includes sending a local message from the application module over the local network to the target network device which performs a function in response to the local message. Teng taught that in the redirecting step, the processing of the functionality by the application module includes sending a local message from the application module over the local network to the target network device which performs a function in response to the local message (col. 9, lines 1-10).

10. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura, Cooper and Teng because Teng's teaching of processing of the functionality by the application module includes sending a local message from the application module over the local network to the target network device which performs a function in response to the local message would increase the mobility of Sugiura's and Cooper's systems by allowing remote access of a target network device function by sending a local message.

11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiura and Cooper in view of Wilson, Jr., U.S. Patent 6,757,280 (hereinafter Wilson).

12. Wilson was cited in the last office action.

13. As per claim 2, Sugiura and Cooper taught the invention substantially as claimed in claim 1 above. Sugiura and Cooper did not teach the application module sending a response message from the application module over the external network to the client network device, the response message having a source identification address identical to a source identification address of the target network device. Wilson taught a similar system wherein the application module includes sending a response message from the application module over the external network to the client network device, the response message having a source identification address identical to a source identification address of the target network device (col. 9, lines 43-54).

14. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura, Cooper and Wilson because Wilson's system of sending a response message having a source address of network device would increase the reliability of Sugiura's and Cooper's systems by providing an acknowledgement to the requesting client.

15. Claims 19-21 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiura and Cooper in view of Krishnan, U.S. Patent 6,157,950 (hereinafter Krishnan).

16. Krishnan was cited in the last office action.

17. As per claim 19, Sugiura and Cooper taught the invention substantially as claimed in claim 1 above. Sugiura and Cooper did not teach determining which one of the external network and the local network is used for sending the outbound message. Krishnan taught that in the redirecting step, the processing of the functionality by the application module includes preparation of an outbound message for delivery to a designated device on one of the external network and the local network, and a routing table is used to determine which one of the external network and the local network is used for sending the outbound message to the designated device (col. 7, lines 53-col. 8, lines 39).

18. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper and Krishnan because Krishnan's method of determining the path for the outbound message would increase the efficiency of Sugiura's and Cooper's systems by providing the shortest path for sending the outbound message to the destination.

19. As per claim 20, Sugiura, Cooper and Krishnan taught the invention substantially as claimed in claim 19 above. Krishnan further taught that the routing table contains a cross-reference indicator for each target network device to indicate which one of the external network and the local network is used for sending the outbound message to the designated device (col. 7, lines 53-col. 8, lines 39).

Art Unit: 2152

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper and Krishnan for the same reason set forth in claim 19 above.

21. As per claim 21, Sugiura, Cooper and Krishnan taught the invention substantially as claimed in claim 19 above. Krishnan further taught that the routing table is used to determine whether a preset IP address of the second network interface card or a source IP address of the client network device is used as a source IP address in the outbound message (col. 7, lines 53-col. 8, lines 39).

22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper and Krishnan for the same reason set forth in claim 19 above.

23. As per claim 32, Sugiura and Cooper taught the invention substantially as claimed in claim 1 above. Sugiura and Cooper did not teach sending a plurality of undesirable messages over one of the external network and the local network. Krishnan taught including the step of transmitting a plurality of undesirable messages from the application module over one of the external network and the local network (col. 8, lines 25-39; col. 9, lines 12-36).

24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper and Krishnan because Krishnan's method

Art Unit: 2152

of sending undesirable message to external network and the local network would increase the reliability of Sugiura's and Cooper's systems by allowing unidentified message to be routed to the destination.

25. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiura, Cooper and Teng in view of Krishnan, U.S. Patent 6,157,950 (hereinafter Krishnan).

26. As per claims 16 and 18, Sugiura, Cooper and Teng taught the invention substantially as claimed in claim 3 above. Sugiura, Cooper and Teng did not teach that the second network interface card is assigned a preset IP address, and the local message contains the preset IP address as source address. Krishnan taught that the second network interface card is assigned a preset IP address, and the local message contains a source IP address which is identical to the preset IP address (col. 5, lines 10-21; col. 7, lines 4-6, 31-42).

27. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper, Teng and Krishnan because Krishnan's method of using the IP address of the second network interface card as source address would increase the reliability of their systems by allowing message to be routed to a computer via a network interface card with an assigned IP address that identifies the computer.

28. As per claim 17, Sugiura, Cooper and Teng taught the invention substantially as claimed in claim 3 above. Sugiura, Cooper and Teng did not teach that the message contains the IP

Art Unit: 2152

address of the client network device as source address. Krishnan taught that the local message contains a source IP address which is identical to a source IP address of the client network device (col. 7, lines 53-col. 8, lines 17).

29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper, Teng and Krishnan because Krishnan's teaching of local message having a source IP address of client network device would increase the reliability of their systems by allowing a gateway to identify the client network device that sent the local message.

30. Claims 4-10, 15, 24, 26, 28, 33, 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiura and Cooper in view of, Banginwar, U.S. Patent 6,611,863 (hereinafter Banginwar).

31. Banginwar was cited in the last office action.

32. As per claims 4, 26 and 28, Sugiura and Cooper taught the invention substantially as claimed in claim 1 above. Sugiura and Cooper did not teach rules for determining if the incoming message requires a function. Banginwar taught that in the determining step, inbound rules are used to determine if the functionality is to be processed by an application module residing in the computing device (col. 2, lines 18-26).

Art Unit: 2152

33. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura, Cooper and Banginwar because Banginwar's teaching of inbound rules would increase the user flexibility of Sugiura's and Cooper's systems by allowing an incoming message to be process according to predetermined rules set by the user.

34. Sugiura, Cooper and Banginwar did not specifically disclose detailing an inbound rules table. However, It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include an inbound rules table because doing so would increase the field of use in their systems.

35. As per claim 5, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 4 above. Banginwar further taught that the inbound rules table contains a plurality of rules, each rule corresponding to one of a plurality of target network devices on the local network (col. 1, lines 60-col.2, lines 12; col. 5, lines 7-29).

36. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper and Banginwar for the same reason set forth in claim 4 above.

37. As per claim 6, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 5 above. Banginwar further taught a system comprising the step of discovering

Art Unit: 2152

each of the plurality of target network devices on the local network by listening to the local network for messages from the target network devices, creating a target descriptor entry corresponding to each discovered target network device in a target descriptor table, and creating a rule corresponding to each target descriptor entry in the inbound rules table (col. 1, lines 60-col. 2, lines 12; col. 4, lines 10-45; col. 5, lines 7-29).

38. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper and Banginwar for the same reason set forth in claim 5 above.

39. As per claims 7 and 8, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 6 above. Banginwar further taught a system wherein the inbound rules table contains at least one rule which indicates whether a functionality requested for a corresponding target network device to perform is to be processed by an application module residing in the computing device (col. 2, lines 18-26).

40. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper and Banginwar for the same reason set forth in claim 5 above.

41. As per claim 9, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 7 above. Banginwar further taught a system wherein each rule contains an IP

Art Unit: 2152

address of the target network device corresponding to the rule to indicate whether a functionality requested for the corresponding target network device to perform is to be processed by an application module residing in the computing device (col. 4, lines 10-45, lines 54-58; col. 5, lines 7-29).

42. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper and Banginwar for the same reason set forth in claim 5 above.

43. As per claim 10, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 7 above. Sugiura, Cooper and Banginwar did not specifically disclose detailing port identifier contained in each rule. However, Banginwar taught a system wherein each rule contains an IP address of the target network device (col. 4, lines 10-45, lines 54-58; col. 5, lines 7-29). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include a port identifier because doing so would increase the field of use in their systems.

44. As per claim 15, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 6 above. Banginwar further taught comprising the step of publishing each target descriptor entry to the application module (col. 2, lines 2-12).

Art Unit: 2152

45. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper and Banginwar for the same reason set forth in claim 5 above.

46. As per claim 24, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 4 above. Sugiura, Cooper and Banginwar did not specifically disclose detailing a USB network. However, Sugiura taught the local network could be connected with a communication line (page 2, paragraph 40). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to include a network connected with USB because doing so would increase the field of use in their systems.

47. As per claim 33, Sugiura taught the invention substantially as claimed comprising the steps of:

receiving an incoming message from a client network device residing on the external network, the incoming message being addressed to an IP address (e.g. HTTP header with URL address that corresponds an IP address) of a designated target network printer (page 5, paragraph 95; page 6, paragraphs 123 and 124; page 5, paragraph 113);

48. Sugiura did not teach a determining if an application module residing in the computing device is configured to process a functionality requested by the incoming message. Cooper taught a similar invention comprising the steps of:

Art Unit: 2152

determining, if the incoming message requests a functionality that the application module (e.g. installable component 126) is configured to perform (col. 6, lines 23-34; col. 7, lines 29-62);

redirecting, in the case that the incoming message requests a functionality that the application module is configured to perform, the incoming message to the application module which performs the requested functionality in response to the incoming message (col. 6, lines 23-34; col. 7, lines 29-62); and

passing, in the case that the incoming message does not request a functionality that the application module is configured to perform, the incoming message to the designated target network printer (col. 6, lines 23-34; col. 7, lines 29-62).

49. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura and Cooper because Cooper's teaching of determining if an application module residing in the computing device is configured to process a functionality requested by the incoming message would increase the functionality of Sugiura's system by providing a target network device with printer support for a number of different applications and device drivers (col. 1, lines 46-49; col. 2, lines 33-36).

50. Sugiura and Cooper fail to teach the step of discovering a plurality of target network printers and creating a rule for each of the discovered target network printers. Banginwar taught a similar system comprising the steps of:

discovering a plurality of target network printers on the local network by detecting messages on the local network from each of the plurality of target network printers (col. 1, lines 60-col. 2, lines 26); creating a rule in a rules table for each of the discovered target network printers, each rule containing the IP address of the corresponding target network printer (col. 1, lines 60-col. 2, lines 26; col. 5, lines 7-29) and indicating whether an application module in the computing device is configured to perform a function on behalf of the corresponding target network printer (col. 4, lines 10-45, 54-58; col. 5, lines 7-29).

51. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura, Cooper and Banginwar because Banginwar's teaching of discovering legacy network printers would increase the system alertness of Sugiura's and Cooper's systems by allowing new devices added to the system to be notify to the user.

52. As per claim 38, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 33 above. Sugiura further taught wherein the target network device is a legacy network device (page 2, paragraph 39).

53. As per claim 40, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 33 above. Cooper further taught wherein the passing step, the target network printer performs the requested functionality in response to the incoming message received from the computing device (col. 7, lines 30-62).

54. Claims 22-23, 25 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiura, Cooper and Banginwar in view of Krishnan.

55. As per claims 22 and 23, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 7 above. Sugiura, Cooper and Banginwar did not teach tracking port identifier and creating rule corresponding to the port identifier for redirecting message. Krishnan taught a system comprising the step of tracking a port identifier of a port opened by the application module and creating a rule in the inbound rules table corresponding to the port identifier, wherein in the determining step, the rule is used to redirect a message from the external network to the application module if the message contains the port identifier corresponding to the rule (col. 7, lines 53-col. 8, lines 39).

56. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper, Banginwar and Krishnan because Krishnan's method of tracking port identifier and creating rule corresponding to the port identifier for redirecting message would enhance their systems by allowing multiple devices to be connected to the Internet through a shared connection (see, Krishnan, col. 1, lines 65-67).

57. As per claim 25, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 4 above. Sugiura, Cooper and Banginwar did not specifically teach a digital

Art Unit: 2152

camera. Krishnan taught that other devices and peripherals could be accessed from a remote location (col. 1, lines 57-59).

58. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura, Cooper, Banginwar and Krishnan because Krishnan's teaching of accessing a device such as a digital camera would increase the field of use in their system.

59. As per claim 29, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 4 above. Sugiura, Cooper and Banginwar did not teach a file server which sends file over the network. Krishnan taught that the application module is a file server which sends at least one file over the local network to the target network device and at least one file over the external network to the client network device (col. 10, lines 27-33; col. 10, lines 66-col. 11, lines 1).

60. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura, Cooper, Banginwar and Krishnan because Krishnan's teaching of a file server sending file over the external network would increase the field of use in their systems.

61. As per claim 30, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 4 above. Sugiura, Cooper and Banginwar did not teach recording the incoming

Art Unit: 2152

message. Krishnan taught that the inbound rules table contains rules which are used in the determining step to determine that a set of designated incoming messages are copied to the application module which records each of the set of designated incoming messages (col. 8, lines 40-col. 9, lines 36).

62. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura, Cooper, Banginwar and Krishnan because Krishnan's method of recording the incoming message would increase the user alertness of Sugiura's, Cooper's and Banginwar's systems by allowing a user to monitor the messages received by the system.

63. As per claim 31, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 4 above. Sugiura, Cooper and Banginwar did not teach redirecting an undesirable message. Krishnan taught that inbound rules table contains rules which are used in the determining step to detect if the incoming message is an undesirable message (col. 8, lines 25-39; col. 9, lines 12-36), and in the case that the incoming message is an undesirable message, determining that the incoming message is to be processed by the application module (col. 8, lines 25-39; col. 9, lines 12-36), whereby the incoming message is redirected to the application module (col. 8, lines 25-39; col. 9, lines 12-36).

64. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura, Cooper, Banginwar and Krishnan

Art Unit: 2152

because Krishnan's detecting and redirecting an undesirable message would increase the reliability of Sugiura's, Cooper's and Banginwar's systems by allowing unidentified message to be routed to the destination.

65. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiura, Cooper and Banginwar in view of Levine et al, U.S. Patent 6,020,973 (hereinafter Levine).

66. Levine was cited in the last office action.

67. As per claim 11, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 6 above. Sugiura, Cooper and Banginwar did not specifically disclose detailing the discovering step. Levine taught a system wherein the discovering step includes sending a discovery message to each discovered target network device and receiving discovery information in response to the discovery message from the corresponding target network device, wherein the discovery information is placed in the target descriptor entry for the corresponding target network device (col. 12, lines 10-26; col. 13, lines 28-47).

68. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura, Cooper, Banginwar and Levine because Levine's system of having the discovering step would increase the user alertness in their systems by allowing the status of the target network devices to be acknowledged by the user.

Art Unit: 2152

69. As per claim 12, Sugiura, Cooper, Banginwar and Levine taught the invention substantially as claimed in claim 11 above. Levine further taught a similar system comprising a polling step of sending a discovery message on a periodic basis to each discovered target network device (col. 12, lines 10-26; col.13, lines 30-39), and receiving in response to the discovery message discovery information from the corresponding target network device (col. 12, lines 10-26; col.13, lines 30-39), wherein the target descriptor entry is updated with the newly received discovery information (col. 12, lines 10-26; col.13, lines 30-39).

70. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Sugiura, Cooper and Banginwar for the same reason set forth in claim 11 above

71. As per claim 13, Sugiura, Cooper, Banginwar and Levine taught the invention substantially as claimed in claim 12 above. Banginwar further taught that in the case that discovery information is not received in response to the discovery message for a particular one of the discovered target network devices, the target descriptor entry corresponding to the particular discovered target network device is deleted (col. 6, lines 10-31).

72. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura, Cooper, Levine and Banginwar because Banginwar's method of deleting the target descriptor entry corresponding to a network device in the case that the discovery message is not received would increase the system alertness

Art Unit: 2152

in Sugiura's, Cooper's and Levine's systems by allowing the status of the network device to be updated using discovery message.

73. As per claim 14, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 6 above. Sugiura, Cooper and Banginwar did not teach sending a notification to the application module. Levine taught a system comprising the step of sending a notification to the application module for each discovered target network device, the notification containing information related to the target descriptor entry for the corresponding target network device (col. 12, lines 10-26).

74. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura, Cooper, Banginwar and Levine because Levine's system of sending a notification would increase the system alertness in Sugiura's, Cooper's and Banginwar's systems by allowing the status of the target network devices to be acknowledged by the application module.

75. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiura, Cooper and Banginwar in view of Remer et al, U.S. Patent 6,742,039 (hereinafter Remer).

76. Remer was cited in the last office action.

Art Unit: 2152

77. As per claim 27, Sugiura, Cooper and Banginwar taught the invention substantially as claimed in claim 4 above. Sugiura, Cooper and Banginwar did not teach the step of preventing transmission of the incoming messages. Remer taught that the inbound rules table contains rules which are used in the determining step to capture an incoming message from the external network (col. 3, lines 1-14; col. 5, lines 5-9) and further including the step of preventing transmission of the incoming message on the local network (col. 3, lines 1-14; col. 5, lines 5-9).

78. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Sugiura, Cooper, Banginwar and Remer because Remer's teaching of preventing transmission of the incoming message would increase the security in Sugiura's, Cooper's and Banginwar's systems by preventing an unauthorized messages to access a private network.

(10) Response to Argument

The examiner summarizes the various points raised by the appellant and addresses replies individually.

Appellant argued that:

- (1) Sugiura does not teach "receiving an incoming message from a client network device residing on the external network, the incoming message being addressed to a network address of a target network device residing on the local network".

Specifically, appellant argues that Sugiura fails to teach the claimed “Receiving” step because the messages in Sugiura are addressed to the Printer Server, and not to a target device. Examiner disagrees. Sugiura teaches a terminal device generates a message (HTTP data DT) by adding a header with an address of the target printer (i.e. target device) to be used for printing to the print data (page 5, paragraphs 95). A printer server (target device) acquires the message with information about the address of the printer as an output target from the terminal device and transmits the print data to the designated printer (page 5, paragraph 114). This means that the address of the target printer is used by the printer server in order to transmit the print data (i.e. the message) to a designated printer connected to the network (i.e. network address of the printer) (page 2, paragraphs 39-42). The message (i.e., print data plus a header with an address of the designated printer) is addressed to a network address of a designated network device residing on the local network (i.e. print data addressed to a designated printer connected to the network). It is noted that one skilled in the art knows that data transmitted in a network must include a header with a destination address in order to designate a receiver (i.e. a message being addressed to a network address of a target network device).

- (2) Cooper fails to teach the determining if an application module residing in the computing device is configured to process a functionality requested by the incoming message.

In reply to argument (2): on page 28 of the appeal brief, appellant specifically states: “Therefore, Cooper clearly does not determine whether its “application module” (the software

Art Unit: 2152

simulation) is configured to process a server requested by a user; rather, the determination is whether a selected printer can support a hardware server.” This is merely appellant’s interpretation of Cooper’s teaching. Cooper teaches Intelligent printer driver (IPD) (application module) determines if it should process a functionality requested (i.e. printing function) in a message by determining if the selected printer supports the requested functionality. The IPD processes the requested function if the selected printer does not support the requested function (col. 6, lines 23-34; col. 7, lines 29-62). This means IPD determines if it is configured to process the requested function based on the result of determining if the requested function is supported/unsupported by the selected printer (i.e. Cooper teaches the “determining” step as claimed).

(3) The applied art fails to teach “redirecting the incoming message to the application module in the case that the application module is configured to process the functionality”

In reply to argument (3), on page 31 of the appeal brief, appellant specifically states: “The applied Art fails to disclose the Claimed “Redirecting” Step Because Any Redirection in Cooper Does Not Occur In Response To the Claimed Circumstances”. As explained in reply to argument (2), Cooper teaches IPD determines if it is configured to process the requested function based on the result of determining if the requested function is supported/unsupported by the selected printer. This means a decision must be made to determine if the message should be directed to IPD (application module) for performing the requested functionality (by performing

software simulation) if IPD is configured to process the requested function (i.e. IPD is configured to process the requested functionality if it is determined that the requested functionality is unsupported by the selected printer) (col. 6, lines 23-34; col. 7, lines 29-62), or determine if the message should be sent (passing the message) to the printer (target network device) if the IPD is not configured to process the functionality (i.e. IPD is not configured to process the requested functionality if it is determined that the requested functionality is supported by the selected printer) (col. 6, lines 23-34; col. 7, lines 29-62). Hence, Cooper teaches the claimed “redirecting” step by redirecting the message to IPD for performing requested functionality instead of sending the message to the printer.

(4) The applied art fails to teach “passing the incoming message through the local network to the target network device residing on the local network in the case that the application module is not configured to process the functionality”

In reply to argument (4), on page 33 of the appeal brief, appellant specifically states: “The applied Art fails to disclose the Claimed “passing” Step Because Any Passing in Cooper Does Not Occur In Response To the Claimed Circumstances”. As explained in reply to argument (3), Cooper teaches IPD determines if it is configured to process the requested function based on the result of determining if the requested function is supported/unsupported by the selected printer. This means a decision must be made to determine if the message should be directed to IPD (application module) for performing the requested functionality (by performing

Art Unit: 2152

software simulation) if IPD is configured to process the requested function (i.e. IPD is configured to process the requested functionality if it is determined that the requested functionality is unsupported by the selected printer) (col. 6, lines 23-34; col. 7, lines 29-62), or determine if the message should be sent (passing the message) to the printer (target network device) if the IPD is not configured to process the functionality (i.e. IPD is not configured to process the requested functionality if it is determined that the requested functionality is supported by the selected printer) (col. 6, lines 23-34; col. 7, lines 29-62). Hence, Cooper teaches the claimed "passing" step by sending the message (passing the message) to the selected printer through the network for performing requested functionality.

(5) There is no motivation to combine Sugiura and Cooper.

In reply to argument (5), in view of *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. ___, 2007 WL 1237837, the requirements for motivation have changed significantly from those set forth by the appellant. Accordingly, the examiner will not address the case law cited by the appellant. Rather, examiner will further explain his rationale in support of the motivation to combine the Sugiura and Cooper references. Sugiura teaches a method of print control allowing print message to be sent to a selected printer connected to the network (abstract). It is known in the print control art some printers may not support a print function requested by a user. Cooper addresses this problem in the print control field by providing support of the requested function if it is determined that the printer does not support the request function (col. 1, lines 50-64). Therefore, one having ordinary skill in the art at the time of the invention was made would be

Art Unit: 2152

motivated to combine the teachings of Sugiura and Cooper in order to provide network device such as a network printer in Sugiura's system with printer support for a number of different applications and device drivers (col. 1, lines 46-49; col. 2, lines 33-36).

(6) There is no motivation to combine Sugiura and Cooper and Banginwar.

In reply to argument (6), as explained in reply to argument (5), in view of KSR Int'l Co. v. Teleflex Inc., 550 U.S. ___, 2007 WL 1237837, the requirements for motivation has changed significantly from those set forth by the appellant. Examiner will further explain his rational in support of the motivation to combine the Banginwar reference with Sugiura and Cooper. Although Cooper teaches determining if the functionality is to be processed by an application module residing in the computing device (col. 6, lines 23-34; col. 7, lines 29-62), however Sugiura and Cooper do not teach using rules table for the determining. Banginwar teaches using control policies to determine the process of incoming packets (using rules table for determining) (col. 4, lines 18-26). One having ordinary skill in the art at the time of the invention was made would be motivated to combine Banginwar's teaching with Sugiura's and Cooper's systems in order to allow a user to set control policies (rules) for determining how to process a print message in Sugiura's and Cooper's systems.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Art Unit: 2152

(12) Conclusion

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Philip Lee

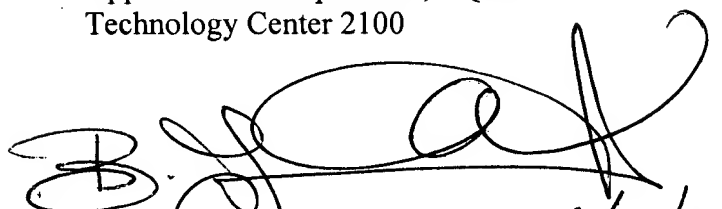
P.L.

Conferees:



Lynne H Browne

Appeal Practice Specialist, TQAS
Technology Center 2100



BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER

6/8/7